

1998 Update to the 8th Edition of the Table of Isotopes CD-ROM

R.B. Firestone, S.Y.F. Chu, and C.M. Baglin

The 8th edition of the *Table of Isotopes*^{*} was published in 1996 by John Wiley & Sons, Inc. The two-volume, 3168 page, cloth-bound, edition contains nuclear structure and decay data for over 3100 isotopes and isomers, extensive appendices, and about 24,000 reference citations. The book is packaged with an interactive CD-ROM containing the *Table of Isotopes* in Adobe Acrobat Portable Document Format (PDF) suitable for viewing with PC and Macintosh computers and UNIX workstations. The CD-ROM version contains a chart of the nuclides graphical index, separate indices organized for applied radioisotope users and nuclear structure physicists, and over 100,000 hypertext links to move the user rapidly through related information. The CD-ROM also contains the *Table of Superdeformed Nuclear Bands and Fission Isomers*, the Evaluated Nuclear Structure Data File (ENSDF), and the Nuclear Science References file (NSR). Over 2500 copies of the 8th edition have been distributed through 1997.

The 1998 Update to the 8th edition of the Table of Isotopes CD-ROM has been sent to the publisher John Wiley & Sons, Inc. The update contains data for about 400 additional isotopes and isomers, newly evaluated mass chain data from the ENSDF file, and updated appendices. It also includes a revised edition of the *Table of Superdeformed Nuclear Bands and Fission Isomers*.

Two new features have been added to the 1998 CD-ROM update; Isotope Explorer software and a local *Table of Isotopes* Internet home page. Isotope Explorer version 2.0 is a Windows 95/NT helper application for viewing ENSDF and NSR data either locally from the CD-ROM or remotely over the Internet from the Isotopes Project server. The Internet home page provides HTML access to the *Table of Isotopes* appendices and additional data for atomic masses, thermal neutron capture, spontaneous fission, and nuclear astrophysics. Links are also provided to the Isotope Explorer software, manuals, and data files, and to the WWW *Table of Isotopes* home page which is regularly updated.

The 1998 Update to the 8th edition of the *Table of Isotopes* CD-ROM will come packaged with a handy booklet that includes introductory material, the Isotope Explorer manual, an Isotope Summary Table summarizing the nearly 3600 isotopes and isomers in the update, an energy-ordered table of γ -rays from radioactive decay parents with half-lives greater than one hour, and an energy-ordered table of alpha particles. The *Table of Isotopes* will also be placed on the Internet to provide users with access to even more up-to-date information from ENSDF and other sources.

Footnotes and References

*R.B.Firestone, V.S. Shirley, C.M. Baglin, S.Y.F. Chu, and J. Zipkin. 8th edition of the *Table of Isotopes*, John Wiley & Sons, Inc. (1996).